

## Asthma Intervention for Children in Central Harlem

## **Public Health Problem**

Asthma prevalence and mortality have been increasing in the United States, but the causes are not completely understood. Some asthma risk factors are known or suspected to be more prevalent in poor, urban communities, where low-quality housing, roach infestation, tobacco smoke exposure, and other conditions contribute to a high asthma burden.

## **Taking Action**

In 2001, the Department of Pediatrics at Harlem Hospital Center partnered with The Harlem Children's Zone, Inc. (HCZ) to reduce the burden of asthma on children and their families in central Harlem. Columbia University's Prevention Research Center collaborated with these partners in conducting a comprehensive and rigorous evaluation of the project's impact.

First, a group of children who had the greatest number of recent asthma symptoms was chosen to enroll in the intervention. Participants received medical, legal, social, educational, and environmental services from a multi-disciplinary team over an 18-month period. Results of the study showed substantial and significant improvements among the participants: school absenteeism decreased by more than half, with a decrease from 23% to 8% due to asthma in particular; a 27% reduction in emergency room and unscheduled physician visits, as well as a nearly 9% reduction in hospitalizations were observed; and use of effective asthma management strategies, such as use of daily preventive medicine and development of an asthma management plan, significantly increased. These results strongly suggest that the program is effective in improving asthma management among children enrolled in the project.

## **Implications and Impact**

Plans are underway to expand the program to all children with asthma identified through asthma screening efforts, and the scope of services offered will be expanded by engaging additional agencies such as the New York City Department of Health and Mental Hygiene, the New York City Department of Education, and the New York City Health and Hospitals Corporation.